

Rescue the Records or Lose the Science

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The time domain is critical to the natural sciences. The changes with time - whether cyclical, monotonic, gentle and reversible or explosive and irreversible - that all natural objects undergo contain information that is far more penetrating than can ever be wrested from a static "snapshot". Science recognizes that the present is a corridor between the past and the future, and its effectiveness depends on how richly that corridor can link its assets at every point.

Modern scientific observations are recorded electronically, and can be located, downloaded, shared and researched in times of both calm and crisis. But many long-term trends concerning our changing Planet require data that pre-date the electronic era. Those early data may exist - somewhere - on paper, film, photographic plate, magnetic tape ... but they are not accessible on-line so they are effectively "lost". Yet it is those early data that furnish true facts about changes in our biosphere; their studies assist local and global knowledge alike. Without actual measurements, "knowledge" is only extrapolation, and offers no sure yardstick against which to determine trends. Understanding and reversing the effects of anthropogenic interference may be central to humanity's survival, yet there is little formal organization for locating and accessing those essential pre-digital data. The recent rates of change in the biosphere require that a rescue solution be formulated urgently, so we MUST organize the retrieval of these pre-digital data.

The CODATA Task Group, "Data At Risk", has set up a Website for recording the basic facts of a "forgotten" database. The talk will include examples of successful recoveries of non-electronic data, and their positive impacts. Its message will touch on all aspects of CODATA's mission, especially in strengthening international science for the benefit of society.

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